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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Benjamin N. Eldridge

P71C2-US

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11/21/2006

FORMFACTOR, INC.  
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EXAMINER

KARLSEN, ERNEST F

ART UNIT

PAPER NUMBER

2829

DATE MAILED: 11/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

### Period for Reply

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 June 2006 and 14 September 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 47-49, 52-55 and 60-67 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 47-49, 52-55 and 60-67 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

The Restriction Requirement of August 14, 2006 is withdrawn and all claims examined.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the structure of the claimed semiconductor device must be shown or the feature(s) canceled from the claim(s). The Amendment to the Drawings of June 6, 2006 does not illustrate the structure of the claimed semiconductor device. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claims 47-49, 52-55 and 60-67 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no original disclosure for the terminals having contact blades capable of the step set forth in claim 60, lines 4-5. The contact blades are not disclosed as being capable of being forced into the interconnection elements or, depending on how lines 4-5 are read, the terminals do not have contact blades.

Claims 47-49, 52-55 and 60-67 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The step of claim 60, lines 4-5, is not clear. It is also not clear what the structural result would be for the semiconductor die that is tested by any of the claims. No structural features are disclosed in the specification and no structural features are presented by the claims. What structural effects would result from the process steps of claims 60-67 is not clear. How such would lead to a functional change is not clear. The limitations of claims 47-49 and 52-55 seem to be yet further away from having any influence on a functional change. What influence does the material composition of the blade have on the structure produced. No description of what the structure would look like for any of the claims is presented in the disclosure.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 47-49, 52-55 and 60-67 are rejected under 35 U.S.C. 102(b) as being anticipated by Littlebury et al '438, cited by Applicants. With regard to claims 60-65, Littlebury et al '438 show a probe having a blade 17 that is forced into a terminal 27 of a bonding pad 27 of a semiconductor die 26. The blade will inherently deflect across the terminal in a motion that is approximately parallel to the axis corresponding to the length of the blade. The blade 17 will inherently cut into terminal 27. The blade 17 is inherently sharpened in that it is smaller than part 16. With regard to claims 52 and 67, blade 17 is disposed on element 13 and is sharpened. With regard to claim 47, blade 17 is integrally formed with elements 13, 14 and 16. With regard to claims 49 and 54, element 13 of Littlebury et al '438 is resilient and can be an alloy as set forth at column 3, lines 25-28 of Littlebury et al '438. Everything is resilient to some degree.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Blonder et al, Trenary, Farnworth et al, Godshalk et al and Palagonia are cited to show additional probes with blade structure.

Applicant's amendment of June 6, 2006 necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2829

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to Ernest F. Karlsen at telephone number 571-272-1961.

Ernest F. Karlsen

November 16, 2006



ERNEST KARLSEN  
PRIMARY EXAMINER